

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re DIVISIONAL application of)
Toshimitsu KONUMA)
Based on Serial No. 09/678,656) Group Art Unit: 2871
Filed: October 4, 2000) Examiner: Julie Ngo
For: ELECTRO-OPTICAL DEVICE)

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450


Sir:

In accordance with the provisions of 37 C.F.R. 1.56 and 37 C.F.R. 1.97-1.99, Applicant submits herewith a Form PTO-1449 listing references known to Applicant and requests that these references be made of record in the above identified application. Copies of the references listed are submitted herewith in accordance with 37 C.F.R. 1.98(a).

U.S. Patent No. 4,596,446 is a family member of JP 02-118517.

The references listed on the attached Form PTO-1449 were cited in parent application Serial No. 09/678,656 and parent application Serial No. 09/359,853; 09/076,819; 08/572,074 and 08/081,705 and copies of the references can be found in those applications.

Respectfully submitted,



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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	Based on 09/678,656
				Filing Date	October 4, 2000
				First Named Inventor	Toshimitsu KONUMA
				Group Art Unit	2871
Examiner Name	Huyen Le Ngo				
Sheet	1	of	3	Attorney Docket Number	0756-7221

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
		4,239,345		Berremman et al.	12/16/80	
		4,272,162		Togashi et al.	06/09/81	
		5,258,135		Uchida et al.	11/02/93	
		5,637,672		Rieger et al.	06/10/97	
		5,462,621		Ishii	10/31/95	
		5,298,297		Takei	03/29/94	
		5,250,214		Kanemoto et al.	10/15/93	
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		5,995,185		Konuma	11/30/99	

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Office ³	Number ⁴	Kind Code ⁵ (if known)			
		JP	03-158823			07/08/91	Full
		JP	63-298220			12/06/88	Abst.
		JP	56-164320			12/17/81	Abst.
		JP	03-031821			02/12/91	Abst.
		JP	01-204025			08/16/89	Abst.

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		
		Matumoto et al., "New Hybrid-Aligned Nematic Multicolor Liquid-Crystal Display," Oyo Buturi, Vol. 45, No. 1, pp. 853-856, 1976.		

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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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		Number	Kind Code ² (if known)			
		4,965,017		Holmes et al.	10/23/90	
		5,013,137		Tsuboyama et al.	05/07/91	
		5,064,697		Takiguchi et al.	11/12/91	
		5,172,187		Brosig	12/15/92	
		5,194,973		Isogai et al.	03/16/93	
		5,250,214		Kanemoto et al.	10/05/93	
		5,200,238		McArdle et al.	04/06/93	
		4,596,446		Waters et al.	06/24/86	

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		JP	52-063746			05/26/77	Full
		JP	64-004721			01/09/89	Abst.
		JP	63-228125			09/22/88	Abst.
		JP	64-055537			03/02/89	Abst.
		JP	64-059325			03/07/89	Abst.
		JP	64-059326			03/07/89	Abst.
		JP	64-059322			03/07/89	Abst.
		JP	64-059324			03/07/89	Abst.
		JP	64-059323			03/07/89	Abst.
		JP	64-059328			03/07/89	Abst.
		JP	64-059327			03/07/89	Abst.
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		EP	0 376 030			12/1988	
		JP	3-276122			12/06/91	Full
		JP	52-037249			03/23/77	Full

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		JP	64-091172			04/10/89		Full
		JP	2-118517			05/02/90		Full
		JP	04-140714			05/14/92		Abst.
		JP	51-037249			03/29/76		Abst.
		JP	03-031821			02/12/91		Full
		JP	02-287317			11/27/90		Full
		JP	05-158045			06/25/93		Abst.
		JP	04-355726			12/09/92		Abst.

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		M. Nishikawa et al., "Alignment Layers for Active Matrix LCD," The Technical Report of the Proceedings of the Institute of Electronics, Information and Communication Engineers, Vol. 91, No. 467, pp. 13-18, February 13, 1992.	

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